



ORC

Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

Rating Office
Hellenic Sailing Federation
Offshore Committee
Επιτροπή
Ανοικτής Θαλάσσης
Ελληνικής
Ιστιοπλοϊκής Ομοσπονδίας



Certificate
Number **00489**
Issued On **06/06/2020**
ORC Ref **03420000K29**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**

Crew Weight

Default	486kg
Maximum	249kg
Minimum*	164kg

*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring

ToD	ToT
Non Spin GPH 774.5	0.7747
Non Spin OSN 747.5	0.8027

Sails Limitations

Headsails **1** Spinnakers **4**

Spinnaker configuration
Symmetric: **Yes** **73.87**
Asymmetric: **Yes** **55.65**
Flying H/S: **No**
Spin. Pole: **Yes**

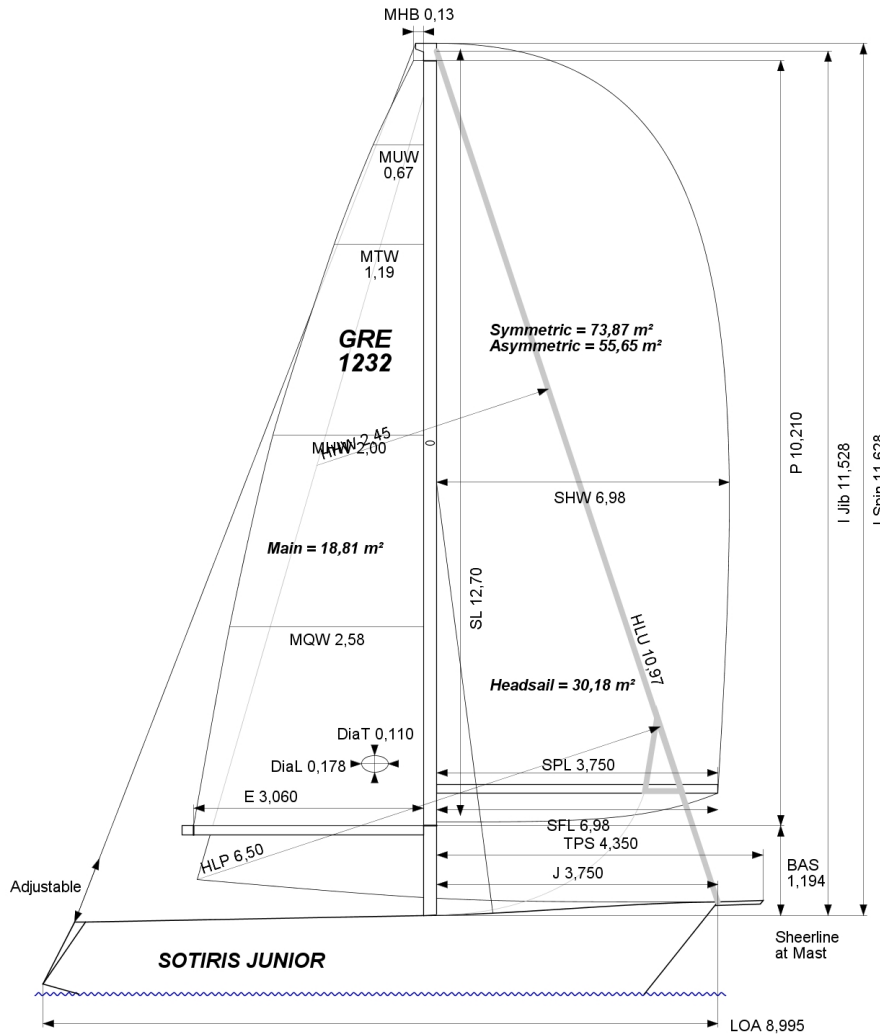
Class Division Length

CDL = 6.772

Stability (Measured)

Limit Positive Stab.: **118.9°**
Stability Index: **117.9**

Owner



BOAT Name SOTIRIS JUNIOR Sail Nr GRE-1232	GPH 735.0	HULL Data File GR1232 LOA 8.995m Offset File H168.BOF MB 3.220m Displacement 3,971kg Draft 1.785m
CLASS Class NEREIS 30 Designer VAN DE STADT Builder AKROPORO Series 03/1981 Age Date 01/1989 Age Allowance 0.487%		IMS Division Cruiser/Racer Dynamic All. 0.431% Plan Review Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions No
COMMENTS		IMSL 7.664m VCGD 0.131m Sink 13.27kg/mm RL 5.884m VCGM 0.005m WS 18.34m² LSM0 7.831m Displacement/Length ratio 8.2689
PROPELLER Installation Shaft exposed PRD 0.340 Type Solid 3 blades PBW 0.118 PIPA 0.0154		Water Ballast 0 Trim Tab No BLR Index 0.0000
SCORING OPTIONS		CENTERBOARD NA
	COASTAL / LONG DISTANCE	WINDWARD / LEEWARD
Time on Distance	712.2	793.4
Time on Time	0.8425	0.8507
Triple Number	Low Medium High	Low Medium High
Time on Distance	851.7 648.0 577.7	1097.4 798.6 689.3
Time on Time	0.7925 1.0417 1.1684	0.6151 0.8452 0.9793

BOAT	
Name SOTIRIS JUNIOR	Sail Nr GRE-1232
File GR1232	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 16/06/2007		SG	
FFM 1.188	FF 1.213	SFFP 0.450	
FAM 0.974	FA 0.962	SAFP 8.434	
W1 48.4	PD1 256.0	WD 10.420	
W2 48.4	PD2 256.0	GSA 50.2	
W3 48.4	PD3 256.0	RSA 5024.0	
W4 48.4	PD4 256.0	PLM 2098.0	
LCF from stem on CL / on sheer		5.095 / 5.340	
Maximum beam station from stem		5.147	
RM Measured		71.6kg-m	
RM Default		65.8kg-m	
Limit of positive stability / Stab.Index		118.9° / 117.9	
Freeboard at mast at 3.750		1.051	



ORC
Offshore Racing Congress
World leader in rating technology

2020
Measurements
Datasheet

RIG			
Forestay Tension Aft	Spreaders 1		
Inner Stay Fixed	Runners/Checkstays 0		
Carbon Mast No	Jib Furler Yes		
Fiber Rigging No	Main Furler No		
Non-Circular Rigging No			
Articulated Bowsprit No			
P 10.210	E 3.060	MDT1 0.110	MW 0.178
IG 11.528	J 3.750	MDL1 0.178	GO 0.178
ISP 11.628	SFJ 0.000	MDT2 0.110	BD 0.118
BAS 1.194	SPL 3.750	MDL2 0.178	MWT
FSD 0.032	TPS 4.350	TL 0.000	MCG

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Shaft exposed	PRD 0.340		
Type Solid 3 blades	PBW 0.118		
Twin Screw No	PIPA 0.0154		
PSA 19.500	PHL 0.058	ST3 0.011	ESL 0.530
PSD 0.025	ST1 0.011	ST4 0.063	
PHD 0.044	ST2 0.094	ST5 0.150	

Certificate

Number **00489**
ORC Ref **03420000K29**
Issued On **06/06/2020**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**



COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ORC	0.13	0.67	1.19	2.00	2.58	18.82					* Copied from legacy					
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.05	0.59	1.18	2.45	3.89	6.50	10.97	173%	30.18		No		05/04/2014		Dacron	
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	12.70	12.70	12.70	6.98	6.98	73.88		23/04/2015		Unknown						
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
2	10.47	10.40	10.44	6.95	4.20	55.66	asym		20/04/2018		Unknown					

MEASUREMENT INVENTORY				
Measurer GRE-20				
Date 16/02/2007				
Comment				
Internal Ballast total = 0.0				
Id	Item	Weight	Distance	VCG Description
2a	Ancher	41.8	1.00	GQR-8 Kgr &
4	Tools	10.0	5.10	
Id	Item	Maker	Model	
5	Engine	MITSUBISHI	K3D	
Id	Item	Weight	Distance	VCG Description

MEASUREMENT INVENTORY									
Id	Item	Tank	Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
6a	Tank	FUEL		PVC HARD	70.0	7.15		0-0	EMPTY
6b	Tank	WATER		PVC SOFT	100.0	4.05		0-0	EMPTY
6c	Tank	WATER		PVC SOFT	150.0	4.00		0-0	EMPTY
Id	Item	Weight	Distance	VCG Description					
3a	Battery	77.3	6.85	3 x 100 Ah (3 x 25,75 Kgr)					
9a	Misc	25.0	0.65	ANCHOR WINDLASS					
9b	Misc	10.0	0.00	FURLING					
9c	Misc	45.0	7.95	LIFERAFT (NOT ON BOARD DURING					

2020

ORC Club Certificate Appendix

BOAT			
Name	SOTIRIS JUNIOR	Certificate Number	00489
Sail Nr	GRE-1232	Issued On	06/06/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1285.4	1066.9	947.1	870.5	833.1	821.1	827.5
52°	837.4	710.6	631.8	594.4	577.4	570.9	569.7
60°	792.2	675.0	607.1	577.9	562.4	554.2	550.9
75°	759.8	646.3	590.0	564.6	548.4	536.1	522.3
90°	764.9	633.6	575.2	550.2	537.9	528.6	503.3
110°	739.0	611.3	561.2	535.0	514.7	498.4	477.3
120°	762.1	621.2	565.0	536.5	511.7	489.8	463.1
135°	840.5	679.8	586.3	551.2	525.7	500.8	459.8
150°	983.7	780.7	652.1	581.5	550.7	527.2	482.5
Run VMG	1135.9	901.4	752.9	657.7	595.7	560.3	514.5
Selected Courses							
Windward / Leeward	1210.7	984.2	850.0	764.1	714.4	690.7	671.0
Circular Random	1019.1	820.0	712.5	650.0	612.4	589.1	563.2
Coastal / Long Distance	1203.2	922.9	764.1	669.2	620.6	587.4	536.6
Non Spinnaker	1087.6	869.5	750.1	679.5	636.1	608.9	578.7

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.5°	41.6°	41.3°	41.6°	40.5°	40.1°	40.5°
Beat VMG	2.80	3.37	3.80	4.14	4.32	4.38	4.35
52°	4.30	5.07	5.70	6.06	6.24	6.31	6.32
60°	4.54	5.33	5.93	6.23	6.40	6.50	6.53
75°	4.74	5.57	6.10	6.38	6.56	6.72	6.89
90°	4.71	5.68	6.26	6.54	6.69	6.81	7.15
110°	4.87	5.89	6.41	6.73	6.99	7.22	7.54
120°	4.72	5.80	6.37	6.71	7.04	7.35	7.77
135°	4.28	5.30	6.14	6.53	6.85	7.19	7.83
150°	3.66	4.61	5.52	6.19	6.54	6.83	7.46
Run VMG	3.17	3.99	4.78	5.47	6.04	6.43	7.00
Gybe Angles	148.0°	151.5°	149.0°	159.0°	180.0°	180.0°	180.0°